

Work Order ID 112934

112934

Page 1

February-10-14 3:06:35 PM

Item ID: D1048 Accept *N9000040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Clamp
 Start Date: 2/10/14 Start Qty: 12.00 *12* Cust Item ID:
 Required Date: 2/10/14 Req'd Qty: 12.00 *12* Customer:
 Reference:

Approvals: Process Plan: MLJ Date: 14-02-11 Tooling: _____ Date: _____
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____
 Run Start *NR1*
 Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D1048	Rev A								
100	FLOW WATER JET	0.00							DAS 37 9-89
100									mm
Waterjet	Memo	0.00							
FLOW CNC Waterjet	1-Cut as per Dwg D1048 Dwg Rev: <u>A</u> Prog Rev: <u>A</u> 2-Deburr if necessary								14/06/02
110	QC2- Inspect parts off machine FAI/FAIB	0.00							DAS 37 9-89
110									mm
QC	Memo	0.00							
Quality Control									14/06/02
120	QC8- Inspect parts - second check	0.00							DAS 16 9-89
120									
QC	Memo	0.00							
Quality Control									14/06/02

SCRAP

count

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Crosstube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Work Order ID 112934

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Item ID: D1048 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Clamp
 Start Date: 2/10/14 Start Qty: 12.00 *12* Cust Item ID:
 Required Date: 2/10/14 Req'd Qty: 12.00 *12* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Small Fab	0.00							
130									
Small Fab	Memo	0.00							
Small Fab	1-Deburr if required. Break all sharp corners .010 / .020 as per dwg.								
140	NC BRAKE	0.00							
140									
Brake NC	Memo	0.00							
Brake NC	Form as per dwg D2010 using DT8053								
150	QC5- Inspect part completeness to step on W/O	0.00							
150									
QC	Memo	0.00							
Quality Control									

PTO →

DQA: AA Date: 15/05/08



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: RA Date: 15/05/08

Work Order update only ☐

Work Order: <u>112934</u> Part No. <u>D1048</u> NCR No. <u>15-4903</u>	DISPOSITION Rework ☐ Scrap ☒ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☒</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☒	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
Machining ☐	Small Fab ☒	Prod. Eng. Coord. ☐	Quality ☐															
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐															
Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design				old tooling was not to drawing.	DAS 16 9-89 15/04/08	Scrap & destroy	<u>RA</u> 12.04.29	DAS 30 9-89	DAS 9 9-89
Doc/Data									
Equip/Tooling	15.04.29	140	23	R.C. Tooling and drawing update to had more material on Flat patterns PAR15419	052042	New tooling is in place DT# 10143	<u>RA</u> 15.04.29	APR 29 2015	15.04.29
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☒ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge	☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Packaging

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order update only ☐

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Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐															
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐															
Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
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Offset/Setup									
Process									
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Training									
Transport									
Unapproved									

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Work Order ID 112934***112934***

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Item ID: D1048 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Clamp
Start Date: 2/10/14 Start Qty: 12.00 ***12*** Cust Item ID:
Required Date: 2/10/14 Req'd Qty: 12.00 ***12*** Customer:
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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	QC21- Final Inspection - Work Order Release	0.00							
190									
QC	Memo	0.00							
Quality Control									

~~SCRAP~~
15-4-29

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

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Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
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FAULT CATEGORY

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Picklist Print

Friday, May 23, 2014 1:16:46 PM

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Work Order ID: 112934

112934

Parent Item: D1048

D1048

Parent Item Name: Clamp

Start Date: 2/10/2014

Required Date: 2/10/2014

Start Qty: 24.00

Required Qty: 24.00

Comments: IPP: B02.02.22Re-formatNG
IPP Rev:C Now on Waterjet 06-12-06 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S16GA		Purchased	No			100	sf	282.8670	0.018	1			
M304S16GA									**			mm	14/06/02
304/316 Sheet .063													

Location

Loc Qty

Loc Code

MAT020

282.867

M127821

75.567

M128423

1.2

M129192

206.1

0.6

RELEASED
9/10/02

NOTES:

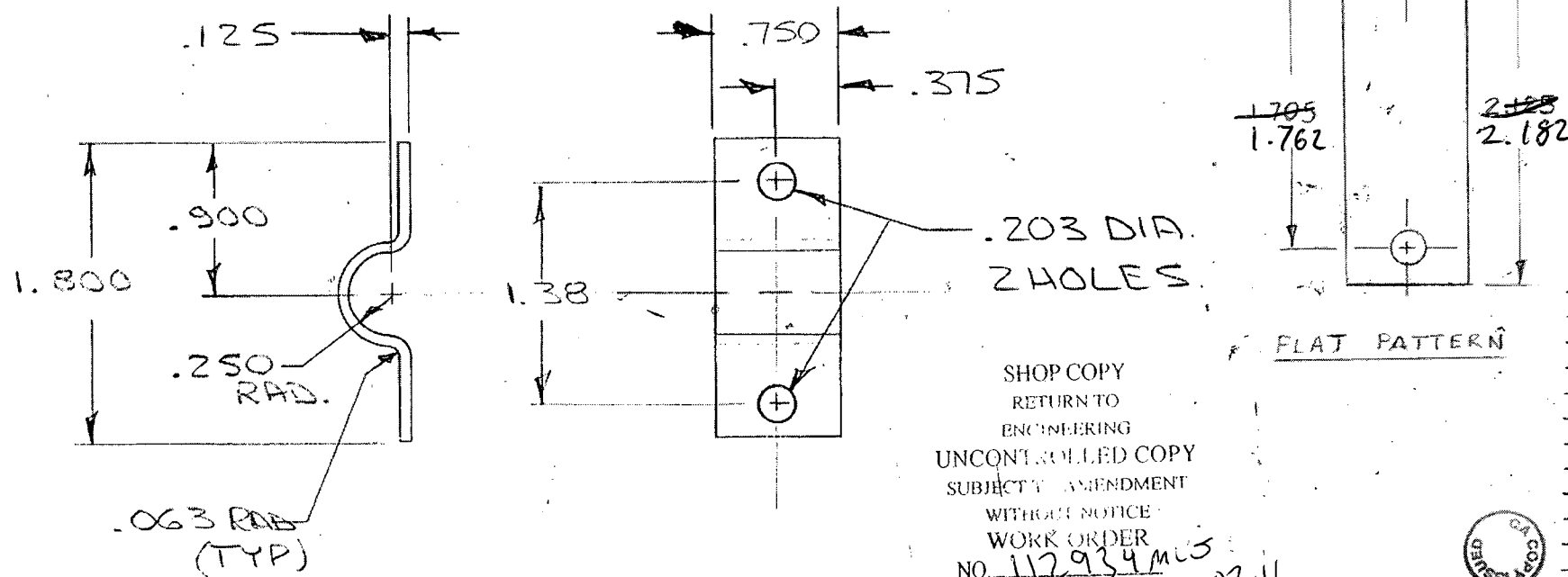
1) MATERIAL

STAINLESS STEEL

T304#2B .062 THICK

2) FINISH: POWDER COAT BLACK SANDTEX (REF. 4.3.5,7)
PER DART QSI 005 4.3

3) BREAK ALL SHARP EDGES 0.010 TO 0.020



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 112934 MLC
14-02-11



A		REVISION	THIS DRAWING IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT THE PERMISSION OF DART AERO.	RIVET CODE SHALL BE PER NAS 623		PART NO.	ITEM	DESCRIPTION	MATERIAL	SPEC/VENDOR	
RE		DRAWN		BASIC CODE	DIA. DASH NO. R-HEAD NEAR SIDE P-HEAD FAR SIDE	CONTRACT NO.		DART AERO ACCESSORIES INC. VANCOUVER CANADA			
APPROVED				D-OMPLS DASH-NO OF SHEETS C-COUNTERSINK	LENGTH DASH NO W-SPOTWELD	DRAWN BRADLEY		DATE JULY 11/97			
DESCRIPTION OF CHANGE			REQUIREMENTS — UNLESS OTHERWISE SPECIFIED		BASIC CODES B-MS20470AD BB-MS20426AD		TITLE CLAMP				
			GENERAL	LIMITS							
			1. DIMENSIONS ARE IN INCHES	1. TOLERANCES — XX .030	REPORT ALL DISCREPANCIES — DO NOT SCALE						
			2. SURFACE ROUGHNESS 1912	XX .010							
			3. REMOVE SHARP EDGES .015 MAX	2. ANGLES 1 90°							
			4. THREADS PER INCH — 5 1742	3. PARALLELISM 1 .0075							
			5. HOLES PER AND 10397	4. ECCENTRICITY 1 .005 MAX							
			5. SYMMETRY ABOUT ALL MFC CENTRE LINES .005								

A1048 REV A custom